

Amendments to the Claims:

Please delete Claims 17, 18, 19, 34, 35, 36, 40, 41, 42 and amend Claims 1-7, 14, 21-24, 34, 38, 39, 48, and 51 as shown in the listing of the claims. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of Claims:

1. (currently amended) A method comprising steps of:

acquiring one of a plurality of immersive video frames at a first location, said one of said plurality of immersive video frames a portion of an immersive video;

apportioning said one of said plurality of immersive video frames into a plurality of portions;

scaling one or more of said plurality of portions;

storing each of said plurality of portions in a standard television video frame; and

~~packing said one of said plurality of immersive video frames into at least one standard television video frame; and~~

sending, from said first location, said ~~at least one~~ standard television video frame capable of being received at a second location using a television signal transmission mechanism.

2. (currently amended) A method comprising steps of:

acquiring one of a plurality of immersive video frames at a first location, wherein said one of said plurality of immersive video frames contains a warped representation of a scene and is a portion of an immersive video;

apportioning said one of said plurality of immersive video frames into a plurality of portions

scaling one or more of said plurality of portions;

storing each of said plurality of portions in a standard television video frame; and

~~packing said one of said plurality of immersive video frames into at least one standard television video frame;~~

sending, from said first location, said ~~at least one~~ standard television video frame to a second location using a television signal transmission mechanism;

receiving, by a television signal receiver mechanism at said second location, said ~~at least one~~ standard television video frame;

unwarping a portion of said ~~at least one~~ standard television video frame into a view; and

presenting said view.

3. (currently amended) A method comprising steps of:

receiving ~~at least one~~ a standard television video frame containing one of a plurality of immersive video frames, by a television signal receiver mechanism;

wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame;

unwarping a portion of said ~~at least one~~ standard television video frame into a view; and

presenting said view.

4. (currently amended) The method of claim 1 or 2 wherein the steps of acquiring, ~~packing,~~ apportioning, scaling, storing, and sending are repeated with a second one of said plurality of immersive video frames.

5. (currently amended) The method of claim 1 further comprising receiving said ~~at least one~~ standard television video frame by a television signal receiver mechanism at said second location.
6. (currently amended) The method of claim 5 further comprising steps of:
 - unwarping a portion of said ~~at least one~~ standard television video frame into a view; and
 - presenting said view.
7. (currently amended) The method of claim 1 or 2 ~~wherein the step of packing comprises steps~~ further comprising the step of:
 - unwrapping an annular image contained within said one of said plurality of immersive video frames. ~~frames; and~~
 - ~~scaling said unwrapped annular image to fit within said at least one standard television video frame.~~
8. (original) The method of claim 1 wherein said one of said plurality of immersive video frames contains a warped representation of a scene.
9. (original) The method of claim 2 or 8 wherein said warped representation results from capturing said scene through a catadioptric lens.
10. (original) The method of claim 2 or 8 wherein said warped representation results from capturing said scene through at least one wide-angle lens.

11. (original) The method of claim 2 or 8 wherein said warped representation results from capturing said scene through at least one fish-eye lens.
12. (original) The method of claim 2, 3 or 6 wherein the step of presenting comprises a step of recording said view on a videotape, a disk, an optical film or other tangible recording media.
13. (original) The method of claim 2, 3 or 6 wherein the step of presenting comprises a step of displaying said view on a television, a computer monitor, or on a tangible media.
14. (currently amended) The method of claim 2, 3 or 6 further comprising steps of:
 - reconstructing said one of said plurality of immersive video frames from said ~~at least one~~ standard television video frame;
 - compressing said one of said plurality of immersive video frames into a compressed frame;
 - storing said compressed frame in a server computer; and
 - serving said compressed frame from said server computer to a client device; wherein the step of unwarping is performed at said client device.
15. (original) The method of claim 14 wherein said client device is selected from the group consisting of a client computer, a television receiver, a video conferencing receiver, a personal organizer, a set-top-box, and an entertainment system.

16. (original) The method of claim 14 wherein the step of serving sends said compressed frame to said client device using a transmission mechanism selected from the group consisting of a microwave link, a television cable system, a direct subscriber line (DSL) system, a satellite communication system, a fiber communication system, an Internet, a digital television system, an analog television system, a wire system and a wireless system.
17. (cancelled)
18. (cancelled)
19. (cancelled)
20. (original) The method of claim 1 or 2 wherein the step of acquiring acquires said plurality of immersive video frames from a digital video camera, an analog video camera in communication with a digitizer, a video playback device, or a computer.
21. (currently amended) An apparatus comprising:
 an acquisition mechanism configured to acquire one of a plurality of immersive video frames at a first location, said one of said plurality of immersive video frames a portion of an immersive video;
 an apportionment mechanism configured to apportion said one of said plurality of immersive video frames into a plurality of portions;

a scaling mechanism, responsive to the apportionment mechanism, configured to scale one or more of said plurality of portions;

a portion storage mechanism configured to store each of said plurality of portions in a standard television video frame; and

~~a packing mechanism configured to pack said one of said plurality of immersive video frames received by the acquisition mechanism into at least one standard television video frame; and~~

a sending mechanism configured to send, from said first location, said ~~at least one~~ standard television video frame capable of being received at a second location using a television signal transmission mechanism, said ~~at least one~~ standard television video frame packed by the packing mechanism.

22. (currently amended) A system comprising:

an acquisition mechanism configured to acquire one of a plurality of immersive video frames at a first location, wherein said one of said plurality of immersive video frames contains a warped representation of a scene and is a portion of an immersive video;

an apportionment mechanism configured to apportion said one of said plurality of immersive video frames into a plurality of portions;

a scaling mechanism, responsive to the apportionment mechanism, configured to scale one or more of said plurality of portions;

a portion storage mechanism configured to store each of said plurality of portions in a standard television video frame;

~~a packing mechanism configured to pack said one of said plurality of immersive video frames acquired by the acquisition mechanism into at least one standard television video frame;~~

a sending mechanism configured to send from said first location, said ~~at least one~~ standard television video frame to a second location using a television signal transmission mechanism, ~~said at least one standard television video frame responsive to the packing mechanism;~~

a television signal receiver mechanism at said second location configured to receive said ~~at least one~~ standard television video frame sent by the sending mechanism;

a transformation mechanism configured to unwarp a portion of said ~~at least one~~ standard television video frame received by the television signal receiver mechanism into a view; and

a presentation mechanism configured to present said view as transformed by the transformation mechanism.

23. (currently amended) An apparatus comprising:

a television signal receiver mechanism configured to receive ~~at least one~~ a standard television video frame containing one of a plurality of immersive video frames;

wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame;

a transformation mechanism configured to unwarp a portion of said ~~at least one~~ standard television video frame

received by the television signal receiver mechanism into a view; and

a presentation mechanism configured to present said view as transformed by the transformation mechanism.

24. (currently amended) The apparatus of claim 21 or 22 ~~wherein the packing mechanism further comprising: comprises:~~

a mapping mechanism configured to map an annular image contained within said one of said plurality of immersive video frames. frames; ~~and~~

~~a scaling mechanism configured to scale said mapped annular image to fit within said at least one standard television video frame.~~

25. (original) The apparatus of claim 21 wherein said one of said plurality of immersive video frames contains a warped representation of a scene.

26. (original) The apparatus of claim 22 or 25 wherein said warped representation results from capturing said scene through a catadioptric lens.

27. (original) The apparatus of claim 22 or 25 wherein said warped representation results from capturing said scene through at least one wide-angle lens.

28. (original) The apparatus of claim 22 or 25 wherein said warped representation results from capturing said scene through at least one fish-eye lens.

29. (original) The apparatus of claim 22 or 23 wherein the presentation mechanism comprises a recording mechanism configured to record said view on a videotape, a disk, an optical film or other tangible recording media.
30. (original) The apparatus of claim 22 or 23 wherein the presentation mechanism comprises a display mechanism configured to display said view on a television, a computer monitor, or on a tangible media.
31. (currently amended) The apparatus of claim 22 or 23 further comprising:
- a reconstruction mechanism configured to reconstruct said one of said plurality of immersive video frames from said ~~at least one~~ standard television video frame;
 - a compression mechanism configured to compress said one of said plurality of immersive video frames into a compressed frame;
 - a storage mechanism configured to store said compressed frame in a server computer; and
 - a server mechanism configured to serve said compressed frame from said server computer to a client device; wherein the transformation mechanism is located at said client device.
32. (original) The apparatus of claim 31 wherein said client device is selected from the group consisting of a client computer, a television receiver, a video conferencing receiver, a personal organizer, a set-top-box, and an entertainment system.

33. (original) The apparatus of claim 31 wherein the server mechanism is configured to send said compressed frame to said client device using a transmission mechanism selected from the group consisting of a microwave link, a television cable system, a direct subscriber line (DSL) system, a satellite communication system, a fiber communication system, an Internet, a digital television system, an analog television system, a wire system and a wireless system.

34. (cancelled)

35. (cancelled)

36. (cancelled)

37. (original) The apparatus of claim 21 or 22 wherein the acquisition mechanism acquires said plurality of immersive video frames from a digital video camera, an analog video camera in communication with a digitizer, a video playback device, or a computer.

38. (currently amended) A computer program product comprising:
a computer usable data carrier having computer readable code embodied therein for causing a computer to send one of a plurality of immersive video frames, said computer readable code comprising:

computer readable program code configured to cause said computer to effect an apportionment mechanism configured to apportion said one of said plurality of immersive video frames into a plurality of portions; ~~computer readable program code configured to cause said computer to effect a~~

~~packing mechanism configured to pack~~ wherein said one of said plurality of immersive video frames is capable of being received by an acquisition mechanism at a first location ~~into at least one standard television video frame,~~ and said one of said plurality of immersive video frames being a portion of an immersive video; ~~and~~

computer readable program code configured to cause said computer to effect a scaling mechanism, responsive to the apportionment mechanism, configured to scale one or more of said plurality of portions; and

computer readable program code configured to cause said computer to effect a portion storage mechanism configured to store each of said plurality of portions in a standard television video frame; and

computer readable program code configured to cause said computer to effect a sending mechanism configured to send, from said first location, said ~~at least one~~ standard television video frame capable of being received at a second location using a television signal transmission ~~mechanism,~~ said ~~at least one standard television video frame packed by the packing~~ mechanism.

39. (currently amended) The computer program product of claim 38 wherein the ~~packing mechanism further comprises:~~ further comprising

computer readable program code configured to cause said computer to effect a mapping mechanism configured to unwrap an annular image contained within said one of said plurality of immersive video frames. ~~frames; and~~

~~computer readable program code configured to cause said computer to effect a scaling mechanism configured to scale~~

~~said unwrapped annular image to fit within said at least one
standard television video frame.~~

40. (cancelled) .

41. (cancelled)

42. (cancelled)

43. (original) The computer program product of claim 38 wherein the acquisition mechanism is capable of acquiring said plurality of immersive video frames from a digital video camera, an analog video camera in communication with a digitizer, a video playback device, or a computer.

44. (original) The computer program product of claim 38 wherein said one of said plurality of immersive video frames contains a warped representation of a scene.

45. (original) The computer program product of claim 44 wherein said warped representation results from capturing said scene through a catadioptric lens.

46. (original) The computer program product of claim or 44 wherein said warped representation results from capturing said scene through at least one wide-angle lens.

47. (original) The computer program product of claim 44 wherein said warped representation results from capturing said scene through at least one fish-eye lens.

48. (currently amended) A computer program product comprising:

a computer usable data carrier having computer readable code embodied therein for causing a computer to present one of a plurality of immersive video frames, said computer readable code comprising:

computer readable program code configured to cause said computer to effect a transformation mechanism configured to unwarp a portion of said one of said plurality of immersive video frames contained in ~~at least one~~ a standard television video frame received by a television signal receiver mechanism into a view, said ~~at least one~~ standard television video frame, containing one of said plurality of immersive video frames; wherein said one of a plurality of immersive video frames is apportioned into a plurality of portions in said standard television video frame; and

computer readable program code configured to cause said computer to effect a presentation mechanism configured to present said view as transformed by the transformation mechanism.

49. (original) The computer program product of claim 48 wherein the presentation mechanism comprises computer readable program code configured to cause said computer to effect a recording mechanism configured to record said view on a videotape, a disk, an optical film or other tangible recording media.

50. (original) The computer program product of claim 48 wherein the presentation mechanism comprises computer readable program code configured to cause said computer to effect a

display mechanism configured to display said view on a television, a computer monitor, or on a tangible media.

51. (currently amended) The computer program product of claim 48 further comprising:

computer readable program code configured to cause said computer to effect a reconstruction mechanism configured to reconstruct said one of said plurality of immersive video frames from said ~~at least one~~ standard television video frame;

computer readable program code configured to cause said computer to effect a compression mechanism configured to compress said one of said plurality of immersive video frames into a compressed frame; computer readable program code configured to cause said computer to effect a storage mechanism configured to store said compressed frame in a server computer; and

computer readable program code configured to cause said computer to effect a server mechanism configured to serve said compressed frame from said server computer to a client device; wherein the transformation mechanism is located at said client device.

52. (original) The computer program product of claim 51 wherein said client device is selected from the group consisting of a client computer, a television receiver, a video conferencing receiver, a personal organizer, a set-top-box, and an entertainment system.

53. (original) The computer program product of claim 51 wherein the server mechanism is configured to send said compressed

frame to said client device using a transmission mechanism selected from the group consisting of a microwave link, a television cable system, a direct subscriber line (DSL) system, a satellite communication system, a fiber communication system, an Internet, a digital television system, an analog television system, a wire system and a wireless system.

54. (original) A computer program product comprising of claim 38 or 48 wherein the computer usable data carrier is a computer readable media.
55. (original) A computer program product comprising of claim 38 or 48 wherein the computer usable data carrier is a carrier wave.